

Sang-Heon Song

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Education

Ph.D	University of Michigan	(Sep. 2009 – present)
Nuclear Engineering	Thesis Advisor: Prof. Mark J. Kushner	
B.S. and M.S.	Seoul National University	(Mar. 1999 – Aug. 2005)
Nuclear Engineering	Thesis Advisor: Prof. Gon-Ho Kim	

Research and Professional Experience

- Engineer, Samsung Electronics Co., Ltd., LCD Business (Aug. 2005 – Jul. 2009)
- Research Assistant, Seoul National University, Korea (Sep. 2003 – Aug. 2005)

Awards received

- Encouragement Award, Busan Metropolitan City Office of Education, Physics Contest (1998)
- Excellence Award, Korea Nuclear Energy Foundation (KNEF), Essay Writing Contest (1997)

Publications

- Gon-Ho Kim, **Sang-Heon Song**, “Optimum Operating Frequency of Atmospheric-Pressure Dielectric Barrier Discharge for Photo-Resistor Ashing Process”, Journal of the Korean Physical Society **49**(2), 558 (2006).
- Gon-Ho Kim, **Sang-Heon Song**, Soo-Yeon Jeong and Ho-Cheol Kwon, “Capacitance Between an Atmospheric Discharge Plasma and the Dielectric Electrode in the Parallel Cell Reactor”, Journal of the Korean Physical Society **49**(3), 1307 (2006).

Conference Presentations with Proceedings

- **Sang-Heon Song**, Daniel Kwon, Moon-Pyo Hong, and Gon-Ho Kim, “Geometrical Effect of Atmospheric Dielectric Barrier Discharge on PR Ashing”, 12th Korean Conference on Semiconductors, Korea, Feb 2005.
- **Sang-Heon Song**, Moon-Pyo Hong, and Gon-Ho Kim, “PR Ashing Using SF₆/He/O₂ Atmospheric Pressure Dielectric Barrier Discharge”, 12th Korean Conference on Semiconductors, Korea, Feb 2005.

Conference Presentations and Posters

- **Sang-Heon Song**, Mark J. Kushner, “Electron Energy Distribution Control in Capacitively Coupled Plasmas”, DOE Plasma Science Center 1st annual meeting, Ann Arbor, MI, May 2010.
- **Sang-Heon Song**, Gon-Ho Kim, “Analysis of the dissipated power density in Atmospheric Dielectric Barrier Discharge”, Korea Accelerator and Plasma Research Association Workshop (KAPRA), Korea, Jul. 2005.
- **Sang-Heon Song**, Ho-Cheol Kwon, and Gon-Ho Kim, “The Property of DBD with liquid dielectric for application to the decomposition of chemical compounds”, Nuclear Technology Undergraduate Student Society (NtUss) Forum, Korea, May 2005.
- **Sang-Heon Song**, Ho-Cheol Kwon, and Gon-Ho Kim, “Characteristics of Atmospheric Dielectric Barrier Discharge for Photoresist Ashing”, 81st Korean Physical Society (KPS) Spring Meeting, Korea, Apr. 2005.
- **Sang-Heon Song**, Ho-Cheol Kwon, Yun-Hwan Kim, Bong-Cheol Jang, Gon-Ho Kim, “Properties of atmospheric dielectric barrier discharge plasma for PR ashing with various operating frequencies and capacitances of reactor”, 80th Korean Physical Society (KPS) Spring Meeting, Korea, Apr. 2004.

Issued Patent

- Liquid crystal display apparatus, Min-Wook Park, Young-Goo Song, In-Woo Kim, and **Sang-Heon Song**, Patent Number: US 7,532,278 (May 12, 2009).

Patent Application

- Array substrate and display panel having the same, Woo-Sung Sohn, Kyung-Suk Jung, and **Sang-Heon Song**, Publication Number: US 20080123005 (May 29, 2008).